

## Palo Verde 3

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### Initiating Events

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### Mitigating Systems

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### Barrier Integrity

 **Significance:** Oct 15, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Procedure Used During Loss of Letdown Event**

IR 05000528-02-06, IR 05000529-02-06, IR 05000530-02-06, on 9/22/02 - 12/28/02, Arizona Public Service Company; Palo Verde Nuclear Generating Station, Units 1, 2, and 3; personnel performance during nonroutine evolutions and event followup. A noncited violation of 10 CFR 50.59 and Technical Specification 5.4.1(a) was identified for failing to perform a required safety evaluation and for inappropriately revising Procedure 40AO-9ZZ05, "Loss of Letdown," Revision 9, in February 1996. Procedure 40AO-9ZZ05 was revised to direct operators to allow charging to increase pressurizer level from 55 percent to 70 percent based on a calculation that assumed the plant was tripped. As a result, the procedure was inadequate for operation at 100 percent power in that the procedure directed operators to allow charging to increase pressurizer level above the Technical Specification limit on pressurizer level in MODES 1, 2, and 3 of 56 percent. When the procedure was used at 100 percent power on October 15, 2002, the probability or likelihood of malfunction of the pressurizer safety valves, equipment previously evaluated in the safety analysis report, increased. The violation was of more than minor safety significance because the inadequate procedure placed the plant in a condition that increased the likelihood that a loss of heat removal accident would cause reactor coolant to pass through the pressurizer safety valves thus causing damage to these valves. The finding is of very low safety significance because of the short duration of the condition and availability of mitigating system components. This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Requests 2560477 and 2580246 (Section 1R14).

Inspection Report# : [2002006\(pdf\)](#)

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### Emergency Preparedness

 **Significance:** Sep 26, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to periodically test the ability to meet minimum emergency response facility staffing response times during off-hours.**

IR 05000528-02-04, IR 05000529-02-04, IR 05000530-02-04, IR 72-44/02-02; Arizona Public Service Company; 6/23/02 - 9/21/02; Palo Verde Nuclear Generating Station, Units 1, 2, and 3; Emergency Response Organization Augmentation Testing and Access Control. A noncited violation of very low safety significance was identified for failure to periodically test the ability to meet minimum emergency response facility staffing response times during off-hours. Off-hours exercises are only conducted once every 6 years, and off-hours quarterly pager and autodialer tests conducted over the past year were only functional tests that did not establish response times to the emergency facilities. Failure to adequately test the ability to meet minimum emergency response facility staffing response times during off-hours is a violation of 10 CFR 50.54(q), which requires that a licensee follow their emergency plans. Section 8.1.3, "Drills," of the Emergency Plan states that drills for the emergency organization are conducted periodically throughout the year to test response timing and emergency equipment and to ensure members of the Emergency Response Organization are familiar with their duties. Section 5.1.2.2 of Emergency Plan Implementing Procedure 08 requires that quarterly pager and autodialer testing be conducted to demonstrate minimum staffing response capability for the emergency facilities. Minimum staffing is defined in Table 1 of the Emergency Plan and includes positions and response times during normal and off-hours for each emergency facility. Contrary to the above, drills for the emergency response organization have not tested off-hours response timing periodically throughout the year. The last off-hours facility activation drill was conducted in 1999, and off-hours pager and autodialer tests conducted each quarter did not demonstrate response timing. The finding was determined to be a performance deficiency

associated with emergency response organization augmentation testing. The finding was evaluated to be more than minor using the Emergency Preparedness Significance Determination Process because it affects the emergency preparedness cornerstone objective in that inadequate testing of the augmentation function can fail to identify problems in staffing the emergency facilities in a timely manner. The finding was evaluated as having very low safety significance (Green), since it was a failure of a regulatory requirement but not a failure to meet an emergency planning standard. This finding is in the licensee's corrective action process as Condition Report/Disposition Request 2532635 and is being treated as a noncited violation (50-528/02-04-01; 50-529/02-04-01; 50-530/02-04-01) in accordance with Section VI.A of the NRC Enforcement Policy (Section 1EP3).  
Inspection Report# : [2002004\(pdf\)](#)

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## Occupational Radiation Safety



**Significance:** Mar 23, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

**Failure to wear a radiation monitoring device that continuously integrated the radiation dose rate in a high radiation area**

Green. Technical Specification 5.7.1.b states, in part, that any individual or group of individuals permitted to enter a high radiation area shall be provided with a radiation monitoring device that continuously integrates the radiation dose rate in an area. On October 14, 2001, the licensee identified that between October 9 and October 11, 2001, eight individuals used a non-functioning electronic dosimeter and entered high radiation areas. The cause of the electronic dosimeter problem was a vendor related firmware problem. The failure to wear a radiation monitoring device that continuously integrated the radiation dose rate in a high radiation area is a violation of Technical Specification 5.7.1. These events are described in the licensee's corrective action program, reference Condition Report/ Disposition Request CRDR 2432485. These events are being treated as a Non-Cited Violation. The safety significance of this finding was determined to be very low (Green) by the Occupational Radiation Safety Significance Determination Process because having a nonfunctioning radiation monitoring device has a credible impact on worker safety, the occurrence involved personnel dosimetry related to measuring worker dose, and there was no overexposure or unintended dose as a result of this nonfunctioning dosimeter.

Inspection Report# : [2002002\(pdf\)](#)

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## Public Radiation Safety

## Physical Protection



**Significance:** Sep 26, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to mark a portion of a document as containing Safeguards information.**

IR 05000528-02-04, IR 05000529-02-04, IR 05000530-02-04, IR 72-44/02-02; Arizona Public Service Company; 6/23/02 - 9/21/02; Palo Verde Nuclear Generating Station, Units 1, 2, and 3; Emergency Response Organization Augmentation Testing and Access Control. A noncited violation of very low safety significance was identified for failure to mark a portion of a document as containing Safeguards information. On September 18, 2001, pursuant to 10 CFR 50.90, the licensee submitted to NRC Headquarters a change to its physical security plan. A portion (page) of this plan change included the size (number) of the armed response force used to defend all three units at Palo Verde and was not marked as containing "Safeguards Information." 10 CFR 73.21 requires, in part, that information regarding the size (number) of responding security forces be marked "Safeguards Information" in a conspicuous manner to indicate the presence of protected information. Following identification of this issue, the licensee withdrew all copies of this physical security plan change. The failure to conspicuously mark a portion of a document as "Safeguards Information" was determined to be a performance deficiency. The finding was evaluated to be more than minor because it affects a physical protection cornerstone objective and if left uncorrected it would become a more significant safety concern. Using the Physical Protection Significance Determination Process, the inspector determined the violation had very low safety significance because there were not more than two similar findings in four calendar quarters. Because of the very low safety significance (Green) and because the licensee included the finding in their corrective action program as Condition Report/Disposition Request 2433526, this finding is being treated as a noncited violation (50-528/02-04-02; 50-529/02-04-02; 50-530/02-04-02) in accordance with Section VI.A of the NRC Enforcement Policy (Section 3PP2).

Inspection Report# : [2002004\(pdf\)](#)



**Significance:** G Sep 26, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to mark a drawing as containing Safeguards information.**

IR 05000528-02-04, IR 05000529-02-04, IR 05000530-02-04, IR 72-44/02-02; Arizona Public Service Company; 6/23/02 - 9/21/02; Palo Verde Nuclear Generating Station, Units 1, 2, and 3; Emergency Response Organization Augmentation Testing and Access Control. A noncited violation of very low safety significance was identified for failure to mark a drawing as containing Safeguards information. On June 27, 2002, the licensee maintained Drawing TY-GL-002 (sheet 1 of 1), which contained an overview block diagram of the Palo Verde new North Access Facility and the new Independent Spent Fuel Storage Installation (ISFSI) and was not marked as containing "Safeguards Information." 10 CFR 73.21 requires, in part, that information regarding the site-specific drawings that substantially represent the final design features of the physical protection system be marked "Safeguards Information" in a conspicuous manner to indicate the presence of protected information. Following identification of this issue, the licensee ensured that all copies of the drawing were properly marked. The failure to conspicuously mark the drawing as "Safeguards Information" was determined to be a performance deficiency. The finding was evaluated to be more than minor because it affects a physical protection cornerstone objective and if left uncorrected it would become a more significant safety concern. Using the Physical Protection Significance Determination Process, the inspector determined the violation had very low safety significance because there were not more than two similar findings in four calendar quarters. Because of the very low safety significance (Green) and because the licensee included the finding in their corrective action program as Condition Report/Disposition Request 2533054, this finding is being treated as a noncited violation (50-528/02-04-03; 50-529/02-04-03; 50-530/02-04-03) in accordance with Section VI.A of the NRC Enforcement Policy (Section 3PP2).

Inspection Report# : [2002004\(pdf\)](#)

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## Miscellaneous

**Significance:** N/A Mar 19, 2002

Identified By: NRC

Item Type: FIN Finding

**Identification and resolution of problems.**

The licensee was generally effective at identifying problems and placing them into the corrective action program. The licensee effectively used risk information in prioritizing the extent of evaluation of individual problems and the schedule for implementation of corrective actions. The licensee effectively prioritized and evaluated issues with few exceptions. One exception involved a final operability evaluation which concluded that the main steam and feedwater isolation system actuation circuitry was operable took approximately 5 months to complete. Another example involved a failure to fully determine the extent of a condition associated with Borg-Warner check valve failures which resulted in additional failures. Corrective actions, when specified, were implemented in a timely manner. Based on interviews conducted during this inspection, workers at the site felt free to input safety issues into the problem identification and resolution program (Section 4OA2).

Inspection Report# : [2002005\(pdf\)](#)

Last modified : March 25, 2003